

Supporting Information

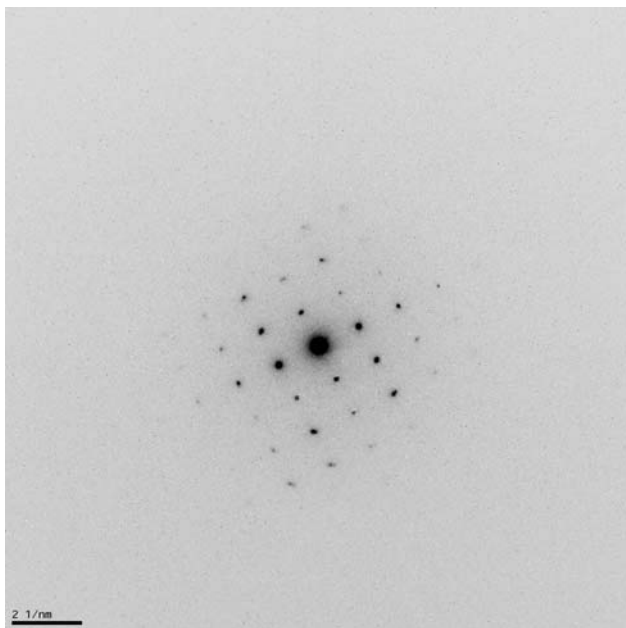


Figure S1. Electron diffraction pattern of SSZ-77 along the [011] zone axis.

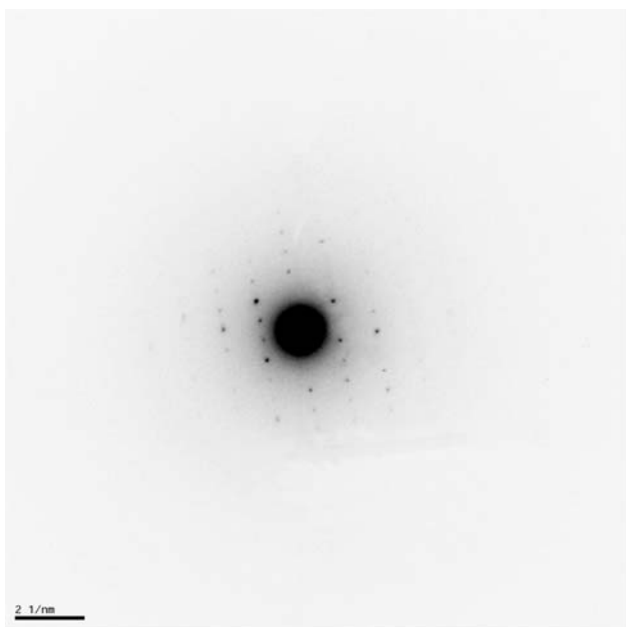


Figure S2. Electron diffraction pattern of SSZ-77 along the [-110] zone axis.

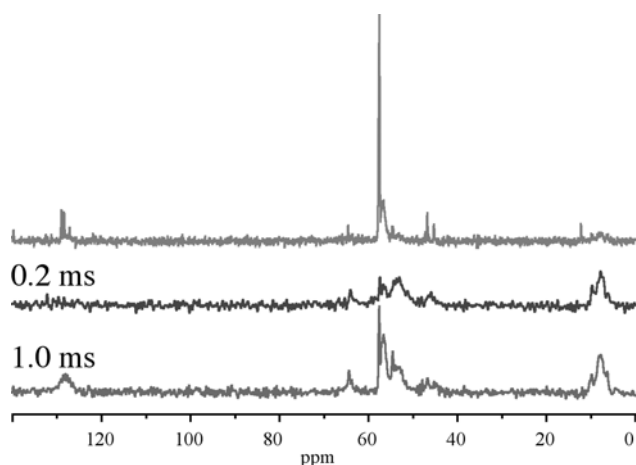


Figure S3. ^{13}C MAS (top) and CPMAS (bottom two spectra with different CP contact times, 0.2 ms and 1.0 ms) NMR spectra for SSZ-77 synthesis using SDA D (see Table 4).

Table S1. Atomic distances and T-O-T angles of SSZ-77 framework atoms.

T-O distances (Å)				T-O-T Angles (°)	
Si1-O8	1.584	Si5-O11	1.598	Si7-O1-S7	164
Si1-O9	1.581	Si5-O14	1.577	Si6-O2-Si6	159
Si1-O10	1.575	Si5-O15	1.631	Si6-O3-Si7	136
Si1-O17	1.603	Si5-O16	1.580	Si6-O4-Si7	137
<Si1-O>	1.586	<Si5-O>	1.597	Si4-O5-Si7	150
				Si4-O6-Si6	142
Si2-O11	1.595	Si6-O2	1.644	Si3-O7-Si4	156
Si2-O13	1.585	Si6-O3	1.671	Si1-O8-Si4	155
Si2-O15	1.615	Si6-O4	1.765	Si1-O9-Si3	146
Si2-O17	1.629	Si6-O6	1.706	Si1-O10-Si1	145
<Si2-O>	1.606	<Si6-O>	1.697	Si2-O11-Si5	149
				Si3-O12-Si3	140
Si3-O7	1.612	Si7-O1	1.746	Si2-O13-Si2	145
Si3-O9	1.562	Si7-O3	1.725	Si3-O14-Si5	166
Si3-O12	1.552	Si7-O4	1.742	Si2-O15-Si5	156
Si3-O14	1.606	Si7-O5	1.608	Si5-O16-Si5	171
<Si3-O>	1.583	<Si7-O>	1.705	Si1-O17-Si2	159
Si4-O5	1.553				
Si4-O6	1.576				
Si4-O7	1.610				
Si4-O8	1.559				
<Si4-O>	1.575				

Table S2. Tetrahedral angles of framework atoms in SSZ-77.

Tetrahedral Angles (°)			
O8-Si1-O9	108.5	O11-Si5-O14	112.9
O8-Si1-O10	109.2	O11-Si5-O15	112.0
O8-Si1-O17	106.0	O11-Si5-O16	108.0
O9-Si1-O10	108.1	O14-Si5-O15	110.8
O9-Si1-O17	113.0	O14-Si5-O16	106.6
O10-Si1-O17	111.9	O15-Si5-O16	106.0
<O-Si1-O>	109.5	<O-Si5-O>	109.4
O11-Si2-O13	109.9	O2-Si6-O3	113.3
O11-Si2-O15	111.3	O2-Si6-O4	108.8
O11-Si2-O17	108.1	O2-Si6-O6	108.4
O13-Si2-O15	112.8	O3-Si6-O4	107.6
O13-Si2-O17	107.1	O3-Si6-O6	111.5
O15-Si2-O17	107.4	O4-Si6-O6	107.0
<O-Si2-O>	109.4	<O-Si6-O>	109.4
O7-Si3-O9	110.4	O1-Si7-O3	106.0
O7-Si3-O12	105.3	O1-Si7-O4	107.8
O7-Si3-O14	101.5	O1-Si7-O5	111.1
O9-Si3-O12	120.2	O3-Si7-O4	109.2
O9-Si3-O14	106.3	O3-Si7-O5	111.6
O12-Si3-O14	111.6	O4-Si7-O5	111.0
<O-Si3-O>	109.2	<O-Si7-O>	109.5
O5-Si4-O6	109.8		
O5-Si4-O7	108.1		
O5-Si4-O8	113.1		
O6-Si4-O7	106.8		
O6-Si4-O8	105.1		
O7-Si4-O8	113.8		
<O-Si4-O>	109.5		